

What is claimed is:

1. An apparatus for centralizing an element within an opening, said apparatus comprising:
  - a first structural element disposed about the centerline of the opening;
  - a second structural element aligned with, and being rotatable relative to, said first structural element;
  - a plurality of tie members having one end attached to each structural element; wherein said structural elements have a first position where said tie members do not cross the opening and a second position where said plurality of tie members extend across the opening.
2. The apparatus of claim 1 wherein said structural elements are adapted to move from the first position to the second position by relative rotation of said structural elements.
3. The apparatus of claim 2 wherein said first structural element is stationary.
4. The apparatus of claim 3 wherein said second structural element is rotatably connected to said first structural element.
5. The apparatus of claim 2 wherein both said first structural element and said second structural element are rotatable relative to each other.
6. The apparatus of claim 1 wherein said plurality of tie members have shape memory.
7. The apparatus of claim 6, further comprising a plurality of pivot connections connecting the end of each of said plurality of tie members to each of said structural elements.

8. The apparatus of claim 6 wherein said plurality of tie members are constructed from wire cable.

9. An apparatus for aligning a body with an axis comprising:

a first ring defining an aperture and aligned with the axis;

a second ring coaxial with and rotatable relative to said first ring;

three tie members connected between said first ring and said second ring, wherein said rings have a first position where said tie members are disposed along the circumference of one of said rings and a second position where said tie members cross the aperture, wherein the length of each tie member is approximately equal to the diameter of said first ring.

10. The apparatus of claim 9 wherein the axis is aligned with the centerline of a well bore.

11. The apparatus of claim 9 wherein said first ring is attached to a stationary structure.

12. The apparatus of claim 11 wherein the stationary structure is a power slip unit.

13. The apparatus of claim 11 wherein the stationary structure is a rotary table.

14. The apparatus of claim 11 wherein the stationary structure is a slip bowl.

15. A method for locating pipe in an opening comprising:

providing a plurality of tie members disposed about the perimeter of the opening;

attaching the plurality of tie members between a first structural element and a second structural element;

rotating the second structural element in a first direction relative to the first structural element such that the plurality of tie members extend across the opening and urge the pipe to the center of said opening.

16. The method of claim 15 further comprising rotating the second structural element in a second direction relative to the first structural element such that the plurality of tie members return to a position disposed about the perimeter of the opening.
17. The method of claim 15 wherein the plurality of tie members includes three members of substantially equal lengths.
18. The method of claim 15 wherein the plurality of tie members includes three members of substantially the same length as the diameter of the circle inscribed within the opening.